REMARKS

I. Status of the claims and the specification

Claims 1, 3-10, and 12-18 are pending. Claim 19 has been canceled without prejudice or disclaimer. Claims 2 and 11 were previously canceled via Applicants' amendments of July 24, 2003, and June 14, 2002, respectively. Claims 1, 3-10, and 12-18 have been amended. In this respect, claim 1 has been amended to qualify the purified polynucleotide, and the dependent vector-, plant cell-, and plant- claims thereof, as consisting essentially of nucleotides 1-2056 of SEQ ID NO. 3. The claims also have been amended to delete the word "cytotoxic" for reasons discussed below. Other claims have been amended solely for grammatical reasons.

Applicants have taken this opportunity to correct the claim dependency of claim 3, as recommended by the Examiner, and acknowledge that claim 3 properly depends from claim 1. Applicants also thank the Examiner for noting that claim 15 was inadvertently omitted from Applicants' claim listing of August 18, 2000. Accordingly, claim 15 is pending for the purposes of examination and Applicants have included that claim in the present claim set.

Applicants have also appended an "Abstract" to this paper to satisfy the requirement under 37 CFR 1.72(b).

II. Overcoming the Office's Rejections

All of the pending claims are directed to a polynucleotide that consists essentially of nucleotides 1-2056 of SEQ ID NO. 3. The Examiner acknowledges that this specific embodiment is enabling. See point 10 at page 7 of the Office Action. Accordingly, Applicants believe that claims 1, 3-10, and 12-18 are free from rejection with respect to the enablement rejection. Thus, Applicants respectfully request that the Examiner withdraw the rejection of these claims under 35 U.S.C. § 112, first paragraph.

i. The claims are free from objection with respect to "homology" and "cytotoxic product"

The Examiner regards claims 1, 3-7, 9, and 13 as lacking written description and, therefore, rejects them under 35 U.S.C. § 112, second paragraph. Applicants thank the Examiner for suggesting a replacement for the word "homology" in claim 1, but since Applicants amended claim 1 to delete subsections (b) and (c), it no longer recites "homology." Accordingly, the claim is free from objection with respect to "homology."

The Examiner maintains, however, that "it is unclear what constitutes a cytotoxic product." According to the Examiner, "Applicant has not defined the threshold toxicity level that delineates a product that is toxic compared with another product that is not toxic."

Applicants respectfully submit that the skilled artisan fully understands what is meant by a "cytotoxic product." The standard definition of "cytotoxic" is "*of, relating to, or producing a toxic effect on cells*," THE AMERICAN HERITAGE® DICTIONARY OF THE ENGLISH LANGUAGE, Fourth Edition, 2000. The person of ordinary skill in the art is well aware of various conditions, environments, genetic predispositions, abnormalities, proteins, and chemicals that may prove toxic to a cell. There is no patentable requirement, however, to "delineate" a precise cytotoxicity by establishing a biological "threshold." Applicants have already highlighted the appropriate portions of the specification which describe the intended purpose of a "cytotoxic product." See Applicants' December 13, 2002, Amendment.

Nevertheless, solely for the purpose of expediting prosecution, Applicants have amended claim 3 to recite that the nucleotides 1-2056 of SEQ ID NO. 3 are operably linked to a DNA sequence that is "capable of destroying a microspore." Support for this phrase can be found at page 4, lines 9-10 of the specification. Applicants have also amended various other claims in similar fashion. Accordingly, Applicants believe the claims are free from objection with respect to the word "cytotoxic" and respectfully request that the Examiner withdraw this rejection.

ii. The present claims are directed to a promoter of a precise nucleotide sequence and, therefore, are free from objection

The Examiner also alleges that Applicants "do not identify structural features unique to the promoter consisting of nucleotides 1-2056 of SEQ ID NO. 3" and that they also do not describe "a gene encoding a male-gamete specific cytotoxic product" or a "subtilisin protease." Despite conveying the precise nucleotide sequence of residues 1-2056 of SEQ ID NO. 3, the Examiner argues that Applicants must also identify "the functional domains of the promoter" and the "cis-acting elements that are required for proper spatial expression in microspores." However, the Examiner is aware of Fourgoux-Nicol *et al.*, Plant Mol. Biol., 40, 857-872, 1999 (of record), which details functional aspects of the "BnM3.4 promoter" that is the presently disclosed. See page 867. Nevertheless, he rejects claims 1, 3-10, and 12-18 under 35 U.S.C. § 112, first paragraph for lack of written description.

Applicants respectfully assert that there is no requirement that they go *beyond* the judicially accepted written description of a claimed DNA molecule, *i.e.*, present more than the DNA's precise nucleotide sequence and function. That is, there is no requirement that Applicants must *also* disclose promoter domains and boundaries in order to convey patentability. Applicants contend that the DNA sequence itself, *i.e.*, nucleotides 1-2056 of SEQ ID NO. 3, is enough to describe the presently claimed, novel promoter. Hence, claim 1 recites a purified DNA of specific sequence, which is capable of expressing a polynucleotide to which it is operably linked and which, therefore, satisfies the written description requirement. Accordingly, the Examiner's contention that "Applicant has not described a representative number of promoter sequences" is moot.

Furthermore, there is no requirement that Applicants provide "specific structural features" of *all* the elements recited in the present claims, as the Examiner contends. The specification discloses that a protease, such as subtilisin, is a "cytotoxic product." Applicants believe it is unnecessary and an improper demand to describe the DNA sequence that encodes all proteases and all subtilisins simply because they have identified those proteins as suitable for use in the present invention.

iii. Claim 7 is not anticipated by Cigan because claim 7 is directed to a promoter having a precise DNA sequence that is not described in the cited art

The Examiner rejected claim 7 as allegedly anticipated under 35 U.S.C. § 102(e) by Cigan *et al.* (USP 5,689,049). Applicants infer from the Examiner's remarks that claim 7 would be free from rejection if it recited a precise DNA sequence. For solely for the purposes of expediting prosecution, Applicants have amended claim 7 to qualify the male-gametophyte-specific promoter as consisting essentially of nucleotides 1-2056 of SEQ ID NO. 3. Applicants consider, therefore, by the Examiner's own rationale, that this rejection is moot and respectfully request that he withdraw this rejection.

iv. Claims 7, 12, and 15 are not rendered obvious by the cited art because those claims are directed to a promoter having a precise DNA sequence

Similarly, the Examiner rejected claims 7, 12, and 15 as rendered allegedly obvious over Cigan *et al.* taken with Zou *et al.*, The Plant Cell, 9, 909-923, 1997. For the reasons related in the preceding paragraph, Applicants consider this rejection is moot in light of the present amendment and respectfully request that the Examiner withdraw this rejection.

III. Conclusion

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

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